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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,706	10/28/2003	Chi Fai Ho	110 Cont3	5206
7590		12/01/2004	EXAMINER	
Peter Tong		HARRIS, CHANDA L		
1807 Limetree Lane		ART UNIT		
Mountain View, CA 94040		PAPER NUMBER		

3714

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/694,706

Applicant(s)

HO ET AL.

Examiner

Chanda L. Harris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 39-58 is/are pending in the application.
- 4a) Of the above claim(s) 52-55 and 58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 39, 41-43, 45-51, 56 and 57 is/are rejected.
- 7) ☒ Claim(s) 40 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/28/03, 7/13/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group I (Claims 39-51, and 56-57) in the reply filed on 7/13/04 is acknowledged. The traversal is on the ground(s) that the claims are closely related and that all the claims have already received an action on the merits. This is not found persuasive because each group of claims consists of mutually exclusive patentably distinct subject matter as indicated in the last office action which consequently imposes a serious burden on the Examiner. Moreover, the record does not show that the claims have already received an action on the merits.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 39, 41-43, 45-51 and 56-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Liverance (US 5,370,399).**

1. [Claim 39]: Regarding Claim 39, Liverance discloses presenting materials on the subject matter to the user via a computer (i.e., apparatus or machine). See Col.7: 27-41

and FIG.20. Liverance discloses monitoring timing (i.e., response time) regarding an input by the user to the computer, with the input being in response to the materials (i.e., machine stimulus). See Col.2: 40-44. Liverance discloses analyzing (i.e., monitoring) the timing and adjusting the materials presented in response to the analysis of the timing, wherein the adjustment is capable of improving the user's concentration in learning the subject (i.e., maintaining the player's interest). See Col.2: 40-44.

2. [Claim 41]: Regarding Claim 41, Liverance discloses wherein monitoring the timing comprises monitoring a time lag between when material is presented and when the user first responds to the material (i.e., response time). See Col.2: 40-44.

3. [Claim 42]: Regarding Claim 42, Liverance discloses wherein monitoring comprises monitoring a speed (i.e., response time) of the user's input. See Col.2: 40-44.

4. [Claim 43]: Regarding Claim 43, Liverance discloses wherein adjusting the materials presented comprises adjusting the materials independent of the content of the input (e.g., based on his response time score). See Col.2: 52-59.

5. [Claim 45]: Regarding Claim 45, Liverance discloses wherein adjusting the materials presented comprises presenting a question (i.e., subsequent question) in response to the analysis of the timing. See Col.2: 28-32.

6. [Claim 46]: Regarding Claim 46, Liverance's invention is capable of having the wherein the question is unrelated to the subject. See Col.33: 19-22.

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7. [Claim 47]: Regarding Claim 47, Liverance discloses wherein the user's reply to the question is not used to assess the user's understanding of the subject (i.e., the student's ability to handle the new material). See Col.30: 32-36.
8. [Claim 48]: Regarding Claim 48, Liverance discloses wherein adjusting the materials presented comprises adjusting at least one of the following in response to the analysis of the timing: a visual effect regarding the materials (e.g., targets made bigger or controlled graphic symbols made more maneuverable), and an audio effect regarding presenting the materials. See Col.9: 35-39, 43-46.
9. [Claim 49]: Regarding Claim 49, Liverance discloses wherein adjusting the materials presented comprises changing a pace (e.g., slowing it down) of the presentation of materials in response to the analysis of the timing. See Col.9: 27-39.
10. [Claim 50]: Regarding Claim 50, Liverance discloses wherein adjusting the materials presented comprises increasing a stimulation level (i.e., difficulty level) of the materials in response to the analysis of the timing. See Col.2: 28-32.
11. [Claim 51]: Regarding Claim 51, Liverance discloses wherein adjusting the materials presented comprises switching to a different set of materials (e.g., questions) in responses to the analysis of the timing (i.e., how quickly the player answers questions). See Col.2: 28-32.
12. [Claim 56]: Regarding Claim 56, Liverance discloses retrieving a characteristic regarding a timing with respect to inputs by the user to a computer during one or more previous working sessions of the user. See Col.2: 28-32. Liverance discloses presenting materials on a subject to the user via a computer (i.e., apparatus or

machine). See Col.7: 27-41 and FIG.20. Liverance discloses monitoring a timing (i.e., response time) of an input by the user to the computer, with the input being in response to the materials (i.e., machine stimulus). See Col.2: 40-44. Liverance discloses analyzing the timing based at least in part on a comparison with the retrieved characteristic and adjusting the materials presented in response to the analysis of the timing, wherein the adjustment is capable of improving the user's concentration in learning the subject. See Col.2: 40-44.

13. [Claim 57]: Regarding Claim 57, Liverance discloses updating the characteristic based on the monitored timing (i.e., adjusting the difficulty of the game to a level suitable to the player). See Col.2: 40-44.

#### ***Allowable Subject Matter***

Claims 40 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Collins et al. (US 5,577,919)  
-response time of user, adjust the timing appropriately

- Slomski (US 4,006,539)
  - testing of a subject's alertness and rate of perception
- Stewart et al. (US 6,053,739)
  - measurement of attention span and attention deficits
- Brown et al. (US 6,186,794)
  - time limits imposed on completing the task, the time it takes to respond

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanda L. Harris whose telephone number is 571-272-4448. The examiner can normally be reached on M-F 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Examiner  
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